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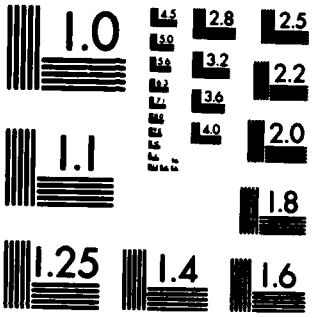

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NAVAL MEDICAL RESEARCH AND DEVELOPMENT COMMAND
BETHESDA, MARYLAND

The Contribution of Social and Emotional Factors To the Utilization of Navy Outpatient Medical Facilities*

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[illegible] the primary function of [illegible] medical [illegible] physicians [illegible] many visits are precipitated by social or emotional [illegible] medical disorders. During [illegible] two-week periods, outpatient visits [illegible] at a [illegible] Corps facility (N = [illegible]) and a Naval Air Station (N = [illegible]) were analyzed to (1) determine the proportion of visits precipitated by social or emotional factors, and (2) to determine the patients' demographic characteristics and treatment processes associated with these visits. Results indicated that approximately 23% of all medical outpatient visits were precipitated by social or emotional factors. Among the populations sampled, sex and age were the best demographic predictors of these visits. Women and older individuals were more likely to enter navy outpatient clinics for social or emotional reasons. These patients were typically diagnosed as having mental/nervous conditions (e.g., anxiety, depression) or general symptoms (e.g., fatigue, headache). They received treatments similar to other patients, were scheduled more follow-up visits than other patients, and were referred to specialists no more frequently than other patients. Implications for the military health care system are discussed.

The Contribution of Social and Emotional Factors to the Utilization of Navy Outpatient Medical Facilities

There is a growing awareness that a substantial proportion of visits to outpatient medical facilities are precipitated by social or emotional conditions (Cooper, 1964; Cummings & Follette, 1968; Mechanic, 1972; Tessler, Mechanic, & Dimond, 1976). In a study of five fee-for-service, general hospital clinics, Rosen, Locke, Goldberg and Babigian (1972) reported that 22% of routine medical patients had an emotional disorder. A twelve-month retrospective survey of outpatient records in a family practice clinic identified psychosocial problems in 33% of the adult clinic population (Stumbo, Good, & Good, 1982). Similarly, Culpan and Davies (1960) found emotional disorders in 51% of the medical patients surveyed and no evidence of organic disease in 38%. A long-term program of research in a comprehensive, prepaid health plan revealed that 60% of visits to physicians were by patients who demonstrated an emotional, rather than an organic, etiology for their symptoms (Cummings & Follette, 1976). The overutilization of medical hospital services by individuals who have mental conditions "masquerading" as physical symptoms could amount to as much as $10 billion per year for misdiagnosis and ineffective treatment (Wiggins, 1976).

Although the manifest function (Merton, 1949) of medical clinics is to provide curative and preventive medicine, people who are experiencing social or emotional difficulties frequently utilize medical facilities to enjoy the latent functions which are typically not recognized. Shuval (1970) considers a number of latent functions ascribed to a major prepaid medical plan in Israel in terms of the following nonmedical needs which they satisfy: a) the need for catharsis, for social contact that permits or encourages free communication; (b) the need to cope with failure, or the utilization of illness as a legitimizing mechanism; c) the need for integration into the social system through contact with a well-established social institution; (d) the need to attain status through contact with high status physicians; and (e) the need for resolution of a magic-science conflict or for allaying certain health superstitions and affirming modern science. This work represents an important new direction toward understanding the latent functions of medical clinics and the social psychological dynamics of health care utilization.

The use of medical clinics for nonmedical problems is in part facilitated by (a) the recognition of stress and other social-environmental factors in the disease process, and (b) the expansion of prepaid health maintenance organizations and comprehensive health insurance plans. As Shuval (1970) points out, contemporary medicine has come increasingly to accept the relevance of the broader aspects of a patient's life to his illness: his family relations, his work situation, his place in the community. As physicians consider the range of potential social psychological contributions to a patient's presenting condition, they become more vulnerable to "exploitation" as sounding boards for personal, nonmedical problems. Likewise, as financial barriers to medical care are reduced or eliminated through membership in health maintenance organizations or expanded health insurance coverage, the physician may be viewed as an accessible professional who will show genuine interest or concern with the patient's personal problems.

While it is reasonably well established that a substantial proportion of medical outpatient visits involve social or emotional problems, very little is known about the patients who seek such care. Henderson (1977) speculated that socially isolated suburban housewives and the elderly were

often deprived of close personal interaction and tended to consult physicians for associated nonmedical reasons. This impression is fairly consistent with data presented by Rosen and her colleagues. In their study of five outpatient general medical clinics, Rosen, et al. (1972) reported that women had significantly higher rates of emotional disorders than men. While the proportion of men and women who visited the clinics for nonmedical problems generally increased with age, women showed a peak rate somewhat earlier (35-44 age group) than men (45-64 age group). These results were generally supported by Stumbo, et al. (1982) who reported that female patients were more likely than male patients to be diagnosed as having psychosocial problems and that the highest precentages of psychosocial diagnoses for both men and women occurred between the ages of 40 and 49 years.

As these individuals enter the outpatient medical clinics to seek help with personal problems, however, they may find the medical practitioner unable or unwilling to engage in the lengthy interaction which they require (Henderson, 1977). The physician may regard a discussion of personal issues as quite superfluous to his primary medical responsibility, that is, identifying organic disease (Eisenberg, 1977). This belief, however, often leads to misdiagnosis and at times iatrogenic harm secondary to unnecessary medication use, hospitalization, laboratory tests, and surgery (Williamson, Beitman, & Katon, 1981). Although it would seem that many medical patients with psychological disturbance, who rely on general medical services, are given less focused psychological care than is desirable, very few are referred to mental health professionals (Gurin, Veroff, & Feld, 1960; Hilkevitch, 1965; Rosen & Weins, 1979; Wiggins, 1976). Those patients who are not referred often leave the medical encounter with no resolution of the real problem, to return yet another time with the same need, to yet another physician (Sears, 1977). It is now well substantiated that patients with mental disorders utilize approximately twice as much nonpsychiatric medical care as patients without such problems (Hankin & Oktay, 1979).

As members of one of the largest fee-free health care systems in the world, military physicians may frequently be utilized to meet the nonmedical needs of the various beneficiary populations. Although Sears (1977) has considered the "profound implications" of the nonmedical use of Navy medical facilities, the issue has not been explored systematically. The primary purpose of the present study is to document the proportion of Navy outpatient visits which are precipitated or aggravated by social or emotional factors. A second purpose of this study is to determine the patient demographic characteristics and treatment processes associated with the nonmedical use of medical health care facilities.

In the present study of Navy health care facilities, it is hypothesized that the utilization of outpatient clinics for social and emotional conditions is significantly related to the sex and age of the patient, such that women are more highly represented than men and older people are seen for social/emotional problems more frequently than younger people. It is further hypothesized that patients with social or emotional problems are typically diagnosed with mental/nervous conditions or general symptoms, require more adjunct services than other patients, and receive a disposition of resolved less frequently than other patients.

Methods

Subjects

Data on outpatient visits were collected at a Navy hospital located on a Marine Corps base

(N = 853) and at a Navy hospital located at a Naval Air Station (N = 890).[1] As shown in Table 1, the samples from these facilities differed substantially on a number of demographic variables.

TABLE 1
PATIENT DEMOGRAPHIC CHARACTERISTICS OF THE MARINE CORPS FACILITY AND NAVAL AIR STATION FACILITY SAMPLES

DEMOGRAPHIC VARIABLE	MARINE CORPS FACILITY (N = 853)		NAVAL AIR STATION FACILITY (N = 890)		TOTAL (N = 1743)	
AGE	$\bar{X}$ = 45.00	SD = 18.35	$\bar{X}$ = 36.72	SD = 15.94	$\bar{X}$ = 40.77	SD = 17.66
PAY GRADE						
Enlisted:						
E 1 - 3	10.0%		11.1%		10.7%	
E 4 - 6	20.0%		42.1%		31.1%	
E 7 - 9	32.0%		26.4%		30.0%	
Warrant Officer:						
W 1 - 4	5.6%		3.4%		4.6%	
Commissioned Officer:						
O 1 - 3	10.9%		4.3%		8.0%	
O 4 - 5	15.4%		7.4%		11.9%	
O 6 - 9	5.6%		0.9%		3.4%	
BRANCH OF SERVICE						
Marine Corps	65.7%		5.1%		38.3%	
Navy	19.8%		72.7%		43.7%	
Army	6.6%		11.7%		8.8%	
Air Force	8.0%		10.6%		9.1%	
SEX						
Male	35.5%		32.3%		34.1%	
Female	64.4%		67.7%		65.9%	
MARITAL STATUS						
Married	82.4%		78.8%		80.7%	
Not Married	17.6%		21.1%		19.2%	
PATIENT STATUS						
Active Duty Member	5.0%		8.9%		6.8%	
Spouse of Active Duty Member	25.6%		33.4%		29.1%	
Child of Active Duty Member	1.4%		5.4%		3.2%	
Retired Member	29.6%		18.1%		24.3%	
Spouse of Retired Member	32.4%		26.3%		29.6%	
Child of Retired Member	5.9%		7.8%		6.8%	

The Marine Corps facility sample was generally older and higher in pay grade than the Naval Air Station sample. These differences may be attributable to the fact that more retired members and their spouses were seen at the Marine Corps Facility. The other sample difference, of course, was that the Marine Corps facility served primarily Marine Corps personnel and their dependents and the Naval Air Station facility served Navy personnel and their dependents.

Procedure

During separate two-week periods in the summer of 1980, outpatient information was collected at the two facilities on a brief, four-page encounter form. Patient demographic information was provided by the patient while waiting to receive care. Subsequent to the patient visit the health care provider completed the checklist portion of the encounter form which assessed diagnosis, adjunct services, disposition, and referral. Information regarding diagnosis was organized in three major categories: a) illness, b) injury, and c) routine visit. In the illness category, 83 of the most frequently occurring diagnoses listed in the International Classification of Health Problems in Primary Care (ICHPPC) or suggested by Navy physicians were organized by organ system. In a similar fashion, 17 injury classifications and 6 categories of routine visits were included in the encounter form.

The adjunct services section included 12 procedures such as laboratory tests, X-ray film exposures, and pulmonary function studies. The disposition of the visit was designated as a) resolved, b) return visit scheduled, c) return PRN (as necessary), or d) admitted. Finally the provider

indicated whether or not he referred the patient and whether or not the visit was precipitated or aggravated by social or emotional factors.

Results

During the course of the study, a total of 2,255 patient visits were recorded. Provider and patient compliance with recording complete data was achieved in 77% of the cases and thus reduced the final sample to 1,743 patient visits. The proportion of missing data was not significantly related to any demographic characteristics of the sample and indicated no selective bias.

Analyses presented in the following sections of the paper addressed a) the proportion of visits precipitated or aggravated by social or emotional factors; b) the demographic predictors of these visits; c) the typical diagnostic categories associated with social or emotional problems; and d) the treatment, disposition, and referral patterns which characterize the process of an outpatient visit for social or emotional reasons. In each section, initial results were developed on the sample of patient visits collected at the Naval Air Station. These findings were then replicated on the sample from the Marine Corps facility. This methodological approach was used to maximize the generalizability of the results.

Proportion of Social Emotional Visits

Of the total 1,743 patient visits recorded in this study, providers indicated that 396, or 23%, were precipitated or aggravated by social or emotional factors. An analysis was then conducted to examine differences in the proportion of social/emotional visits at the Marine Corps and the Naval Air facility. Multiple regression procedures were used to statistically control for sample differences between facilities on the criterion of social/emotional visits. As demographic variables, which included branch of service (Navy or Marine Corps), age, and status (officer or enlisted), were forced into the prediction equation before the facility variable, the contribution of the facility variable was reduced to one-half of one percent of the criterion variance. Because this contribution was considered small and facility differences were not a primary focus of the paper, no further discussion of this issue was deemed appropriate.

Demographic Factors

In this section, multiple regression procedures were used to determine the relationship between patient demographic characteristics and the utilization of outpatient medical facilities for social or emotional problems. Demographic variables included age, sex, and status (officer vs. enlisted member or dependent). Using the demographic data collected on the Naval Air Station sample, stepwise multiple regression procedures were employed to identify those individuals most likely to visit outpatient clinics for social or emotional reasons. Both age and sex produced significant regression coefficients and yielded a multiple R of .17. This analysis demonstrated that older people and women were more likely to be identified as entering Navy outpatient clinics for social or emotional problems.

In the replication analysis, the regression coefficients developed on the Naval Air Station sample were applied to the Marine Corps facility sample. In the Marine Corps sample, individual predicted criterion scores were computed by multiplying age and sex by their respective unstandardized regression coefficients and summing the products. These predicted scores were then correlated with the actual criterion scores obtained in the Marine Corps sample and yielded a significant positive relationship ($r = .12$, $p < .001$).

Subsequent to this successful replication, data from both samples were pooled and presented graphically. As shown in Figure 1, the proportion of visits for social or emotional factors was

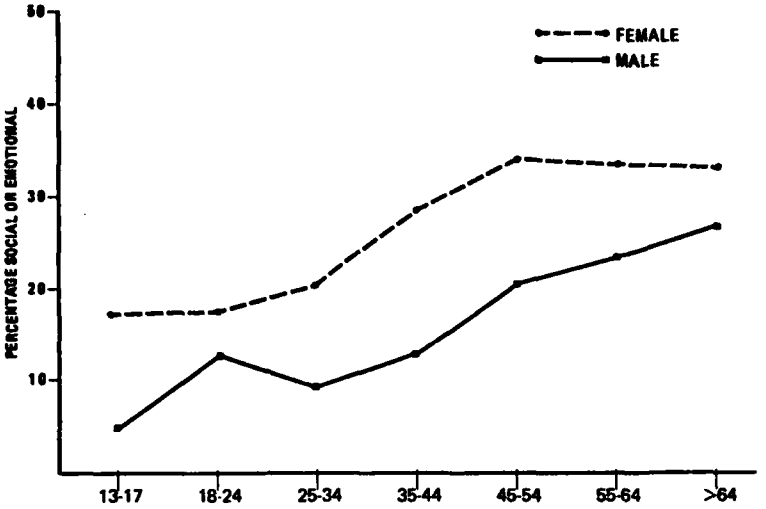

Figure 1. Proportion of visits precipitated by social or emotional factors presented by sex and age of patient.

greater among women than men and increased with age. On the average, social/emotional factors were identified in 25% of all female patient visits and 19% of all male patient visits.

Diagnosis

An inspection of the diagnostic information available in the Naval Air Station sample revealed that those diagnoses which reflected Mental or Nervous conditions, Gastrointestinal Disorders or General Symptoms were most frequently associated with visits identified by the providers as precipitated or aggravated by social or emotional factors. Individual χ^2 analyses of the specific diagnoses included in these categories indicated that 10 diagnoses were significantly associated with visits for social or emotional reasons (Table 2). A repetition of these analyses in the

TABLE 2

DIAGNOSTIC CLASSIFICATION
MOST FREQUENTLY ASSOCIATED WITH OUTPATIENT VISITS
PRECIPITATED BY SOCIAL OR EMOTIONAL FACTORS†

	NAVAL AIR STATION	MARINE CORPS
DIAGNOSIS	χ^2 ($df = 1$)	χ^2 ($df = 1$)
Depression	146.66***	64.15***
Anxiety	102.28***	92.40**
Obesity	41.65***	4.88*
Irritated Bowel Syndrome	19.34***	5.04*
Fatigue	13.60**	4.40*
Peptic Ulcer	9.90**	6.12**
Abdominal Pain	8.29**	NS
Headache	8.29**	5.72**
Hypertension	8.17**	NS
Diarrhea	4.37*	NS

*$p < .05$
**$p < .01$
***$p < .001$
†The correction for continuity was used in the computation of the χ^2 statistic.

Marine Corps facility sample replicated the original results in 7 of the 10 diagnoses. In both samples, anxiety and depression were the diagnostic labels most strongly associated with individuals who visited the clinics for social or emotional reasons.

Treatment Process

The following analysis identified those treatment processes which were associated with visits for social or emotional reasons. Treatment variables included visit status (initial vs. follow-up), provider seen (physician vs. physician extender), number of adjunct services performed, visit disposition (resolved vs. not resolved), and referral for further care (referred vs. not referred). Using the Naval Air Station sample, a stepwise multiple regression analysis was conducted to determine those treatment variables which discriminated between visits for social/emotional reasons and all other visits. In this analysis only visit disposition demonstrated a significant association with the criteria ($r = .12$, $p < .01$). Those visits which were precipitated by social or emotional factors were significantly less likely to be resolved than visits for other reasons. In the replication analysis of the Marine Corps facility sample, visit disposition was again significantly correlated ($r = .13$, $p < .01$) with the reason for visit criteria and thus supported the original result.

Discussion

The primary purpose of the present study was to document the proportion of Navy outpatient visits which are precipitated or aggravated by social or emotional conditions. Although Navy health care providers identified 23% of all outpatient visits as meeting the social/emotional criteria, this figure is unexpectedly conservative when compared with the 60% rate reported in some pre-paid plans (Cummings, 1977). Of course, the identification of social/emotional factors in outpatient medical visits requires a relatively subjective decision by the health care provider. In a study of five fee-for-service clinics, Rosen, et al. (1972) found a significantly higher proportion of social/emotional problems identified in university-based clinics than in non-university based clinics. These authors speculated that the larger proportion of social/emotional visits identified in the university-based clinics reflected the strong psychiatric orientation in the training of the physicians working there. The relatively modest proportion of visits for social/emotional reasons in the present study may reflect a conservative orientation among military health care providers to identify social or emotional factors in medical outpatient utilization.

An alternative explanation is suggested by the potentially unrepresentative nature of the facilities studied. The relatively low utilization rate for social/emotional factors may be attributed, in part, to the fact that data were collected at facilities located in relatively small communities. Consistent with the social-causation hypothesis (Faris & Dunham, 1939; Lein & Lein, 1978), the prevalence of social/emotional visits to clinics in large urban areas may be significantly greater than the prevalence of such visits in less populated settings. Similarly, factors of selection and learning may influence the utilization patterns among different patient populations. The Marine Corps and Naval Air personnel and their dependents included in the present study may be less inclined to visit medical outpatient facilities for social or emotional factors than other Navy groups.

Among the populations sampled in this investigation, sex and age were the best demographic

predictors of medical outpatient visits precipitated by social/emotional factors. As hypothesized, women were more likely to be identified as entering Navy outpatient clinics for social/emotional problems than men. The proportion of social/emotional visits among women increased with age up to the 45-54 year-old bracket and then leveled off (Figure 1). The proportion of social/emotional visits among men was also positively associated with age but continued to increase beyond the 45-54 age bracket.

As these patients entered the outpatient clinics, they were typically diagnosed as presenting mental/nervous conditions (e.g., anxiety, depression) or general symptoms (e.g., fatigue, headache, irritated bowel syndrome). This finding is consistent with previous reports that patients with psychosocial problems have higher rates of ill-defined conditions (Garfield, et al., 1976). The treatment process associated with social/emotional visits, however, did not differ significantly from the treatment process associated with all other visits. Variables such as type of provider seen, visit status, number of adjunct services performed, and referral for further care did not significantly discriminate social/emotional visits from all other visits. The disposition of social/emotional visits, however, remained unresolved significantly more frequently than the disposition of other visits.

These treatment-related findings are consistent with previous literature which indicates that the majority of those individuals who present personal problems to physicians are treated by the physicians themselves (Fink & Shapiro, 1966; Hilkevitch, 1965; Rosen & Wiens, 1979). Green, Haar, and Hyams (1972), in studying the psychosocial aspect of medical practice, found that the primary treatment of the physician who is confronted with an emotionally disturbed patient is to provide a physical examination and reassurance. When medications are used, patients with psychosocial problems are more likely to be prescribed psychoactive drugs (Stumbo, et al., 1982). General practice physicians are the greatest prescribers of psychoactive drugs, while surgical specialists are the most frequent prescribers of placebo drugs (Carey & Kogan, 1971). The use of unnecessary laboratory tests to search for nonexistent pathology represents another procedure used by physicians to treat individuals with social/emotional problems. Goshen (1970) found that medical diagnoses without accompanying mental evaluation merely forced patients with functional disturbances to develop new complaints and caused the physicians to order more laboratory studies. In the present study it is interesting to note that patients whose visits were precipitated by social/emotional problems received as many adjunct services (X-ray, laboratory tests, medications) as all other patients.

Although there is a great deal of evidence that short term psychotherapy results in a substantial reduction of outpatient medical utilization and in dramatic savings (Follette & Cummings, 1967; Goldberg, Krantz & Locke, 1970; Jones & Vischi, 1979; Rosen & Wiens, 1979), physicians remain reluctant to refer patients to mental health professionals. In a study of physician referrals for mental health care, Carey and Kogan (1971) reported that even when doctors in an experimental condition were informed that a patient had an emotional problem, their pattern of referral was not altered. In the present study, patients whose visits were precipitated by social/emotional factors were rererred to specialists no more rrequently than other patients, and less than 3% were referred to social, psychiatric, or psychological services.

From the results of this and other studies, it is clear that a sizable proportion of the cases in general outpatient medicine have a significant emotional or behavioral component. Some emotional problems are obvious anxiety states or depression; many others appear in the form of bodily complaints that have no ascertainable organic basis and may reflect response to psychological stresses. In the relatively near future, demand for the latent functions of the health care system will almost certainly increase. By the year 2,000, the number of persons over 65 will have risen by 50% if there is no upward change in present life expectancy, and more if there is (Eisenberg, 1977). In the present study, the positive relationship between age and proportion of social/emotional visits supports the proposition that more old people means more disability, less capacity for self-sufficient functioning, and more dependence on social and health supports. Eisenberg (1977) observes that "In the absence of a radical transformation in our culture and a revamping of its social institutions, it will be to the health care system that Americans will turn for relief from distress. We may question whether this is wise, but there is little doubt that it will continue." (pp. 241).

As a major fee-free health care system, the military must ultimately consider the manifold implications of the nonmedical use of medical facilities and respond more assertively to the "caring" aspects of health care delivery. In an essay on the challenge of primary care, Rogers (1977) considers a number of probable trends which will occur in the field of primary care in the next quarter-century. One of the first moves will be toward filling the gaps in the current "hidden" or "latent" system of primary care. The training of family practitioners will be expanded, and the training of internists, pediatricians, and obstetrician-gynecologists will be modified to prepare them more adequately for generalist roles. In the process of developing a more visible primary care system, Rogers believes we will see internal changes in location, context, and attitude in a number of medical specialties. Many specialists (e.g., surgeons, pediatric neonatologists) will become more hospital-based and function more exclusively on a referral basis as consultant; thus continuity of care will again be the function of the generalist, whether internist, pediatrician or family practitioner. Finally, Rogers foresees the integration of new skills in epidemiology, demography, the behavioral sciences and other disciplines into primary care programs. This influx of training and talent will enrich the practice of general medicine intellectually, create more excitement and challenge for aspiring general practice physicians and generally upgrade the status of primary care medicine. As these predicted trends continue to evolve, general practice physicians in both the military and civilian sectors will more completely fulfill a vital function in responding to human distress, a function whose effectiveness cannot be measured by weighing the biological potency of their medicines (Eisenberg, 1977).

References

Carey, K., & Kogan, W. Exploration of factors influencing physician decisions to refer patients for mental health services. Medical Care, 1971, 9, 55-56.

Cooper, B. The epidemiological approach to psychosomatic medicine. Journal of Psychosomatic Research, 1964, 8, 9-15.

Culpan, R., & Davies, B. Psychiatric illness at a medical and a surgical outpatient clinic. Comprehensive Psychiatry, 1960, 1, 228-235.

Cummings, N.A. Prolonged (ideal) versus short-term (realistic) psychotherapy. Professional Psychology, 1977, 8, 491.

Cummings, N.A. & Follette, W.T. Brief psychotherapy and medical utilization. In H. Darken (Ed.), The professional psychologist today: New developments in law, health insurance, and health practice. San Francisco: Jossey-Bass, 1976.

Cummings, N.A., & Follette, W. Psychiatric services and medical utilization in a prepaid health plan setting (Part II). Medical Care, 1968, 6, 31-41.

Eisenberg, L. The search for care. Daedalus, 1977, 106(1), 235-246.

Faris, R., & Dunham, W. Mental disorders in urban areas. New York: Hofner, 1939.

Fink, R., & Shapiro, S. Patterns of medical care related to mental illness. Journal of Health and Human Behavior, 1966, 7, 98-105.

Follette, W., & Cummings, N.A. Psychiatric services and medical utilization in a prepaid health plan setting. Medical Care, 1967, 5, 25-35.

Garfield, S.R., Collen, M.D., Feldman, R., et al: Evaluation of an ambulatory medical care delivery system. New England Journal of Medicine, 1976, 294, 426.

Goldberg, J.D., Krantz, G., & Locke, B.Z. Effect of a short-term outpatient psychiatric therapy benefit on the utilization of medical services in a prepaid group practice medical program. Medical Care, 1970, 8, 419-428.

Goshen, C.E. Diagnostic overkill and management of psychiatric problems. Mental Hygiene, 1970, 54, 306-309.

Green, M., Haar, E., & Hyams, L. Psychosocial aspects of medical practice. Unpublished manuscript, 1972. Cited in H. Darken (Ed.), The professional psychologist today: New developments in law, health insurance, and health practice. San Francisco: Jossey-Bass, 1976.

Gurin, G., Veroff, J., & Feld, S. Americans view their mental health: A nationwide interview survey. New York: Basic Books, 1960.

Hankin, J., & Oktay, J.S. Mental disorder and primary medical care: An analytic review. In National Institute of Mental Health (Rockville, Md.): Series D, No. 5. DHEW Publication No. (ADM) 78-661. Government Printing Office, 1979, 3-49.

Henderson, S. The social network, support and neurosis: The function of attachment in adult life. American Journal of Psychiatry, 1977, 131, 185-191.

Hilkevitch, A. Psychiatric distrubances in outpatients of a general medical outpatient clinic. International Journal of Neuropsychiatry, 1965, 1, 371-375.

Jones, K.R., & Vischi, T.R. Impact of alcohol, drug abuse and mental health treatment on medical care utilization. Medical Care, 1979, 17(12), 1-81.

Lein, R., & Lein, J. Social class and mental illness reconsidered: The role of economic stress and support. Journal of Health and Social Behavior, 1978, 19, 139-156.

Mechanic, D. Some psychological factors affecting the presentation of bodily complaints. New England Journal of Medicine, 1972, 288, 1132-39.

Merton, R.K. Social theory and social structure. New York: Free Press, 1949.

Rogers, D.E. The challenge of primary care. Daedalus, 1977, 106(1), 81-103.

Rosen, B.M., Locke, B.Z., Goldberg, I.D., & Babigian, H.M. Identification of emotional disturbance in patients seen in general medical clinics. Hospital and Community Psychiatry, 1972, 23, 364-370.

Rosen, J.C., & Wiens, A.N. Changes in medical problems and use of medical services following psychological intervention. American Psychologist, 1979, 34(5), 420-431.

Sears, H.J. Radical approach to health care delivery. U.S. Navy Medicine, 1977, 68, 15-16.

Stumbo, D., Good, M., & Good, B. Diagnostic profile of a family practice clinic: Patients with psychosocial diagnoses. Journal of Family Practice, 1982, 14, 281-285.

Shuval, J.T. Social functions of medical practice. San Francisco: Jossey-Bass, 1970.

Tessler, R., Mechanic, D., & Dimond, M. The effect of psychological distress on physician utilization: Prospective study. Journal of Health and Social Behavior, 1976, 17, 353-364.

Wiggins, J.G. Utilization and costs of mental health services. In H. Darken (Ed.), The professional psychologist today: New developments in law, health insurance, and health practice. San Francisco: Jossey-Bass, 1976.

Williamson, P., Beitman, B., & Katon, W. Beliefs that foster physician avoidance of psychosocial aspects of health care. Journal of Family Practice, 1981, 13, 999-1003.

Footnotes

[1]In order to remain consistent with other literature (e.g., Rosen, et al., 1972), pre-adolescent children were not included in the sample. These children accounted for 16.9% of the original sample.

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Social or emotional factors
Mental or nervous conditions

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

During separate two-week periods, medical outpatient visits were monitored at Navy hospitals at a Marine Corps facility (N = 853) and a Naval Air Station (N = 890). Approximately 23% of all medical outpatient visits were precipitated by social or emotional factors. The patients who made these visits were more likely to be women or older people, were typically diagnosed with mental/nervous conditions or general symptoms, were administered treatments similar to all other patients, received a disposition of resolved less fre-

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quently than other patients, and were referred no more frequently than other patients. Implications for the military health care system are discussed.